



Fluorescent lighting for cold environments

MASTER TL-D Xtra Polar

The MASTER TL-D Xtra Polar lamp offers the highest light output at lower temperatures because of the insulation that is created by putting a TL-D (T8) lamp into a T12 tube. The lamp is especially suitable for applications in cold environments where relamping is costly and complex.

Benefits

- High lighting level in low-ambient-temperature applications compared with other fluorescent tubes
- Sharp reduction in maintenance costs due to high reliability and long lifetime
- Supports end-user sustainability programs (low mercury level and low waste due to long lifetime)

Features

- Improved light output in low ambient temperatures
- Peak luminous flux for 58 W is reached at an ambient temperature of -5 °C around the lamp
- The same reliable, long-lifetime performance as regular MASTER TL-D Xtra

Application

- All applications at lower ambient temperatures (below 10 °C)
- Indoor: cold stores and other refrigerated areas
- Outdoor: petrol stations, car parks, shipping docks, petrochemical plants, sign lighting, tunnels

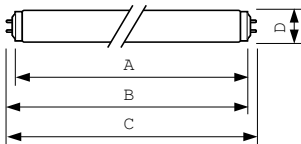
MASTER TL-D Xtra Polar

Versions



G13, T10/T12

Dimensional drawing



Product	D (max)	A (max)	B (max)	B (min)	C (max)
MASTER TL-D Xtra Polar 18W/840 T12 SLV	40.5 mm	589.8 mm	596.9 mm	594.5 mm	604.0 mm
MASTER TL-D Xtra Polar 58W/840 T12 SLV	40.5 mm	1500.0 mm	1507.1 mm	1504.7 mm	1514.2 mm
MASTER TL-D Xtra Polar 36W/840 T12 SLV	40.5 mm	1199.4 mm	1206.5 mm	1204.1 mm	1213.6 mm

MASTER TL-D Xtra Polar

Approval and Application	
Energy Efficiency Label (EEL)	A
Mercury (Hg) Content (Nom)	3.0 mg
Controls and Dimming	
Dimmable	Yes
General Information	
Cap-Base	G13
Life To 50% Failures Preheat (Nom)	55000 h
Life To 10% Failures (Nom)	30000 h
Life To 50% Failures (Nom)	36000 h
LSF 12000 h Rated	99 %
LSF 16000 h Rated	99 %
LSF 2000 h Rated	100 %
LSF 20000 h Rated	99 %
LSF 4000 h Rated	99 %
LSF 6000 h Rated	99 %
LSF 8000 h Rated	99 %
Light Technical	
Color Code	840
Color Designation	Cool White (CW)
Correlated Color Temperature (Nom)	4000 K
Color Rendering Index (Nom)	85
LLMF 12000 h Rated	92 %
LLMF 16000 h Rated	91 %
LLMF 2000 h Rated	96 %
LLMF 20000 h Rated	90 %
LLMF 4000 h Rated	95 %
LLMF 6000 h Rated	94 %
LLMF 8000 h Rated	93 %
Mechanical and Housing	
Bulb Shape	T12

Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/1000 h
927980684075	MASTER TL-D Xtra Polar 18W/840 T12 SLV	21 kWh
927982684075	MASTER TL-D Xtra Polar 36W/840 T12 SLV	41 kWh
927983684075	MASTER TL-D Xtra Polar 58W/840 T12 SLV	66 kWh

Operating and Electrical

Order Code	Full Product Name	Lamp Current (Nom)	Power (Rated) (Nom)
927980684075	MASTER TL-D Xtra Polar 18W/840 T12 SLV	0.378 A	17.0 W
927982684075	MASTER TL-D Xtra Polar 36W/840 T12 SLV	0.453 A	35.0 W

Order Code	Full Product Name	Lamp Current (Nom)	Power (Rated) (Nom)
927983684075	MASTER TL-D Xtra Polar 58W/840 T12 SLV	0.715 A	58 W

Light Technical

Order Code	Full Product Name	Luminous Efficacy (rated) (Nom)	Luminous Flux (Nom)	Luminous Flux (Rated) (Nom)
		(Nom)	(Nom)	(Nom)
927980684075	MASTER TL-D Xtra Polar 18W/840 T12 SLV	76 lm/W	1350 lm	1350 lm
927982684075	MASTER TL-D Xtra Polar 36W/840 T12 SLV	91 lm/W	3350 lm	3350 lm

Order Code	Full Product Name	Luminous Efficacy (rated) (Nom)	Luminous Flux (Nom)	Luminous Flux (Rated) (Nom)
		(Nom)	(Nom)	(Nom)
927983684075	MASTER TL-D Xtra Polar 58W/840 T12 SLV	83 lm/W	4750 lm	4750 lm

MASTER TL-D Xtra Polar

Temperature

Order Code	Full Product Name	Design Temperature (Nom)
927980684075	MASTER TL-D Xtra Polar 18W/840 T12 SLV	15 °C
927982684075	MASTER TL-D Xtra Polar 36W/840 T12 SLV	5 °C

Order Code	Full Product Name	Design Temperature (Nom)
927983684075	MASTER TL-D Xtra Polar 58W/840 T12 SLV	-5 °C

